

Abstract of the Disclosure

A second housing whose center portion is depressed and whose end portion around the center portion is formed like a visor is arranged around a first housing whose center portion is depressed and whose end portion around the center portion is formed like a visor, and a hollow portion is formed between the first housing and the second housing by sandwiching a packing between the end portions of the housings. Further, degassed water for preventing empty heating is filled in the hollow portion, and an ultrasonic transducer is placed on the surface of the center portion of the first housing. A weight for preventing the vibration of the wall is provided on the wall surface of the second housing. Since the vibration of the wall of the housing is suppressed by the weight, vibration energy returns toward the bottom surface of the center of the housing through water and is radiated from the bottom surface efficiently as ultrasonic waves.